

Seq101353.232.txt
SEQUENCE LISTING

<110> SAUNDERS, SCOTT
BERNFELD, MERTON
KATO, MASATO

<120> CONSTRUCTION AND USE OF SYNTHETIC CONSTRUCTS ENCODING SYNDECAN

<130> 101353-232

<140> Herewith
<141> 2004-02-11

<150> 09/723,677
<151> 2000-11-28

<150> 08/471,970
<151> 1995-06-06

<150> 08/078,683
<151> 1993-06-17

<150> 07/856,869
<151> 1992-03-24

<150> 07/757,654
<151> 1991-09-06

<150> 07/746,797
<151> 1991-08-12

<150> 07/331,585
<151> 1989-03-29

<160> 46

<170> PatentIn version 3.0

<210> 1
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tgcaaccggc aactcggatc cacgaagccc accgagctcc cgccgccggt ctgggcagca	240
tgagacgcgc ggcgctctgg ctctggctct gcgcgctggc gctgcgctg cagcctgccc	300
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ctgacaactt ctctggctct ggcacagggt ctttgccaga tactttgtca cggcagacac	420
cttccacttg gaaggacgtg tggctgttga cagccacgcc cacagctcca gagcccacca	480
gcagcaacac cgagactgct ttacctctg tcctgccagc cggagagaag cccgaggagg	540
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aggtcaccac	caggcccagg	gagaccgtgc	agctcccat	cacccaacgg	gcctcaacag	660
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gaaccaaata	tggacgccaa	aacgtaggct	tagtttgtgt	gttgtctctg	agtttgtgct	1920
catgcgtaca	acagggtag	gactatctgt	atggtgcccc	atttttggcg	gcccgttaagt	1980
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catggactca	gggccacggc	cttggcctgg	gccaccgtga	cattggaaga	gcctgtgtga	2100
gaacttactc	gaagttcaca	gtctaggagt	ggaggggagg	agactgtaga	gttttggggg	2160
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caagttcacc	ttcagctcct	gtggccccgc	ccccaggctg	gagtcagaaa	tgtttcccaa	2340
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<210> 2
 <211> 311
 <212> PRT
 <213> MUS SP

<400> 2

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20     25     30
Asp Gln Asp Gly Ser Gly Asp Asp Ser Asp Asn Phe Ser Gly Ser Gly
35     40
Thr Gly Ala Leu Pro Asp Thr Leu Ser Arg Gln Thr Pro Ser Thr Trp
50     55     60
Lys Asp Val Trp Leu Leu Thr Ala Thr Pro Thr Ala Pro Glu Pro Thr
65     70     75     80
Ser Ser Asn Thr Glu Thr Ala Phe Thr Ser Val Leu Pro Ala Gly Glu
85     90     95
Lys Pro Glu Glu Gly Glu Pro Val Leu His Val Glu Ala Glu Pro Gly
100    105    110
Phe Thr Ala Arg Asp Lys Glu Lys Glu Val Thr Thr Arg Pro Arg Glu
115    120    125
Thr Val Gln Leu Pro Ile Thr Gln Arg Ala Ser Thr Val Arg Val Thr
130    135    140
Thr Ala Gln Ala Ala Val Thr Ser His Pro His Gly Gly Met Gln Pro
145    150    155    160
Gly Leu His Glu Thr Ser Ala Pro Thr Ala Pro Gly Gln Pro Asp His
165    170    175
Gln Pro Pro Arg Val Glu Gly Gly Gly Thr Ser Val Ile Lys Glu Val
180    185    190
Val Glu Asp Gly Thr Ala Asn Gln Leu Pro Ala Gly Glu Gly Ser Gly
195    200    205
Glu Gln Asp Phe Thr Phe Glu Thr Ser Gly Glu Asn Thr Ala Val Ala
210    215    220
Ala Val Glu Pro Gly Leu Arg Asn Gln Pro Pro Val Asp Glu Gly Ala
225    230    235    240
Thr Gly Ala Ser Gln Ser Leu Leu Asp Arg Lys Glu Val Leu Gly Gly
245    250    255
Val Ile Ala Gly Gly Leu Val Gly Leu Ile Phe Ala Val Cys Leu Val
260    265    270
Ala Phe Met Leu Tyr Arg Met Lys Lys Lys Asp Glu Gly Ser Tyr Ser
275    280    285
Leu Glu Glu Pro Lys Gln Ala Asn Gly Gly Ala Tyr Gln Lys Pro Thr

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290

295

Lys Gln Glu Glu Phe Tyr Ala
305 310<210> 3
<211> 310
<212> PRT
<213> HOMO SAPIENS

<400> 3

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1 5 10 15
Leu Gln Leu Ala Leu Pro Gln Ile Val Ala Thr Asn Ile Pro Pro Glu
20 25 30
Asp Gln Asp Gly Ser Gly Asp Asp Ser Asp Asn Phe Ser Gly Ser Gly
35 40 45
Ala Gly Ala Leu Gln Asp Ile Thr Leu Ser Gln Gln Thr Pro Ser Thr
50 55 60
Trp Lys Asp Thr Gln Leu Leu Thr Ala Ile Pro Thr Ser Pro Glu Pro
65 70 75 80
Thr Gly Leu Glu Ala Thr Ala Ala Ser Thr Ser Thr Leu Pro Ala Gly
85 90 95
Glu Gly Pro Lys Glu Gly Glu Ala Val Val Leu Pro Glu Val Glu Pro
100 105 110
Gly Leu Thr Ala Arg Glu Gln Glu Ala Thr Pro Arg Pro Arg Glu Thr
115 120 125
Thr Gln Leu Pro Thr Thr His Gln Ala Ser Thr Thr Thr Ala Thr Thr
130 135 140
Ala Gln Glu Pro Ala Thr Ser His Pro His Arg Asp Met Gln Pro Gly
145 150 155 160
His His Glu Thr Ser Thr Pro Ala Gly Pro Ser Gln Ala Asp Leu His
165 170 175
Thr Pro His Thr Glu Asp Gly Gly Pro Ser Ala Thr Glu Arg Ala Ala
180 185 190
Glu Asp Gly Ala Ser Ser Gln Leu Pro Ala Ala Glu Gly Ser Gly Glu
195 200 205
Gln Asp Phe Thr Phe Glu Thr Ser Gly Glu Asn Thr Ala Val Val Ala
210 215 220
Val Glu Pro Asp Arg Arg Asn Gln Ser Pro Val Asp Gln Gly Ala Thr
225 230 235 240
Gly Ala Ser Gln Gly Leu Leu Asp Arg Lys Glu Val Leu Gly Gly Val
245 250 255
Ile Ala Gly Gly Leu Val Gly Leu Ile Phe Ala Val Cys Leu Val Gly
260 265 270

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Phe Met Leu Tyr Arg Met Lys Lys Lys Asp Glu Gly Ser Tyr Ser Leu
 275 280 285

Glu Glu Pro Lys Gln Ala Asn Gly Gly Ala Tyr Gln Lys Pro Thr Lys
 290 295 300

Gln Glu Glu Phe Tyr Ala
 305 310

<210> 4

<211> 313

<212> PRT

<213> RATTUS RATTUS

<400> 4

Met Arg Arg Ala Ala Leu Trp Leu Trp Leu Cys Ala Leu Ala Leu Arg
 1 5 10 15

Leu Gln Pro Ala Leu Pro Gln Ile Val Thr Ala Asn Val Pro Pro Glu
 20 25 30

Asp Gln Asp Gly Ser Gly Asp Asp Ser Asp Asn Phe Ser Gly Ser Gly
 35 40 45

Thr Gly Ala Leu Pro Asp Met Thr Leu Ser Arg Gln Thr Pro Ser Thr
 50 55 60

Trp Lys Asp Val Trp Leu Leu Thr Ala Thr Pro Thr Ala Pro Glu Pro
 65 70 75 80

Thr Ser Arg Asp Thr Glu Ala Thr Leu Thr Ser Ile Leu Pro Ala Gly
 85 90 95

Glu Lys Pro Glu Glu Gly Glu Pro Val Ala His Val Glu Ala Glu Pro
 100 105 110

Asp Phe Thr Ala Arg Asp Lys Glu Lys Glu Ala Thr Thr Arg Pro Arg
 115 120 125

Glu Thr Thr Gln Leu Pro Val Thr Gln Gln Ala Ser Thr Ala Ala Arg
 130 135 140

Ala Thr Thr Ala Gln Ala Ser Val Thr Ser His Pro His Gly Asp Val
 145 150 155 160

Gln Pro Gly Leu His Glu Thr Leu Ala Pro Thr Ala Pro Gly Gln Pro
 165 170 175

Asp His Gln Pro Pro Ser Val Glu Asp Gly Gly Thr Ser Val Ile Lys
 180 185 190

Glu Val Val Glu Asp Glu Thr Thr Asn Gln Leu Pro Ala Gly Glu Gly
 195 200 205

Ser Gly Glu Gln Asp Phe Thr Phe Glu Thr Ser Gly Glu Asn Thr Ala
 210 215 220

Val Ala Gly Val Glu Pro Asp Leu Arg Asn Gln Ser Pro Val Asp Glu
 225 230 235 240

Gly Ala Thr Gly Ala Ser Gln Gly Leu Leu Asp Arg Lys Glu Val Leu
 245 250 255

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Gly Gly Val Ile Ala Gly Gly Leu Val Gly Leu Ile Phe Ala Val Cys
 260 265 270
 Leu Val Ala Phe Met Leu Tyr Arg Met Lys Lys Lys Asp Glu Gly Ser
 275 280 285
 Tyr Ser Leu Glu Glu Pro Lys Gln Ala Asn Gly Gly Ala Tyr Gln Lys
 290 295 300
 Pro Thr Lys Gln Glu Glu Phe Tyr Ala
 305 310

<210> 5
 <211> 309
 <212> PRT
 <213> HAMSTER SP

<400> 5

Met Arg Arg Ala Ala Leu Trp Leu Trp Leu Cys Ala Leu Ala Leu Arg
 1 5 10 15
 Leu Gln Pro Val Leu Pro Gln Ile Val Thr Val Asn Val Pro Pro Glu
 20 25 30
 Asp Gln Asp Gly Ser Gly Asp Asp Ser Asp Asn Phe Ser Gly Ser Gly
 35 40 45
 Thr Gly Ala Leu Pro Asp Ile Thr Leu Ser Arg Gln Ala Ser Pro Thr
 50 55 60
 Leu Lys Asp Val Trp Leu Leu Thr Ala Thr Pro Thr Ala Pro Glu Pro
 65 70 75 80
 Thr Ser Arg Asp Ala Gln Ala Thr Thr Thr Ser Ile Leu Pro Ala Ala
 85 90 95
 Glu Lys Pro Gly Glu Gly Glu Pro Val Leu Thr Ala Glu Val Asp Pro
 100 105 110
 Gly Phe Thr Ala Arg Asp Lys Glu Ser Glu Val Thr Thr Arg Pro Arg
 115 120 125
 Glu Thr Thr Gln Leu Leu Ile Thr His Trp Val Ser Thr Ala Arg Ala
 130 135 140
 Thr Thr Ala Gln Ala Pro Val Thr Ser His Pro His Arg Asp Val Gln
 145 150 155 160
 Pro Gly Leu His Glu Thr Ser Ala Pro Thr Ala Pro Gly Gln Pro Asp
 165 170 175
 Gln Gln Pro Pro Ser Gly Gly Thr Ser Val Ile Lys Glu Val Ala Glu
 180 185 190
 Asp Gly Ala Thr Asn Gln Leu Pro Thr Gly Glu Gly Ser Gly Glu Gln
 195 200 205
 Asp Phe Thr Phe Glu Thr Ser Gly Glu Asn Thr Ala Val Ala Ala Val
 210 215 220
 Glu Pro Asp Gln Arg Asn Gln Pro Pro Val Asp Glu Gly Ala Thr Gly

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Seq101555.252.txt															
225				230				235				240			
Ala	Ser	Gln	Gly	Leu ₂₄₅	Leu	Asp	Arg	Lys	Glu ₂₅₀	Val	Leu	Gly	Gly	Val ₂₅₅	Ile
Ala	Gly	Gly	Leu ₂₆₀	Val	Gly	Leu	Ile	Phe ₂₆₅	Ala	Val	Cys	Leu	Val ₂₇₀	Gly	Phe
Met	Leu	Tyr ₂₇₅	Arg	Met	Lys	Lys	Lys ₂₈₀	Asp	Glu	Gly	Ser	Tyr ₂₈₅	Ser	Leu	Glu
Glu	Pro ₂₉₀	Lys	Gln	Ala	Asn	Gly ₂₉₅	Gly	Ala	Tyr	Gln	Lys ₃₀₀	Pro	Thr	Lys	Gln
Glu ₃₀₅	Glu	Phe	Tyr	Ala											

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<210> 6
<211> 125
<212> PRT
<213> HOMO SAPIEN
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<400> 6

Glu 1	Ser	Leu	Arg	Glu 5	Thr	Glu	Val	Ile	Asp 10	Pro	Gln	Asp	Leu	Leu 15	Glu
Gly	Arg	Tyr	Phe 20	Ser	Gly	Ala	Leu	Pro 25	Asp	Asp	Glu	Asp	Val 30	Val	Gly
Pro	Gly	Gln 35	Glu	Ser	Asp	Asp	Phe 40	Glu	Leu	Ser	Gly	Ser 45	Gly	Asp	Leu
Asp	Asp 50	Leu	Glu	Asp	Ser	Met 55	Ile	Gly	Pro	Glu	Val 60	Val	His	Pro	Leu
Val 65	Pro	Leu	Asp	Asn	His 70	Ile	Pro	Glu	Arg	Ala 75	Gly	Ser	Gly	Ser	Gln 80
Val	Pro	Thr	Glu	Pro 85	Lys	Lys	Leu	Glu	Glu 90	Asn	Glu	Val	Ile	Pro 95	Lys
Arg	Ile	Ser	Pro 100	Val	Glu	Glu	Ser	Glu 105	Asp	Val	Ser	Asn	Lys 110	Val	Ser
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<210> 7
<211> 44
<212> PRT
<213> RATTUS RATTUS
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<400> 7

Tyr Phe Ser Gly Ala Leu Pro Asp Asp Glu Asp Ala Gly Gly Leu Glu
1 5 10 15
Gln Asp Ser Asp Phe Glu Leu Ser Gly Ser Gly Asp Leu Asp Asp Thr
20 25 30
Glu Glu Pro Arg Thr Phe Pro Glu Val Ile Ser Pro
35 40

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<210> 8
 <211> 357
 <212> PRT
 <213> HAMSTER SP

<400> 8

Pro Arg Ala Leu Leu Ser Arg Pro Cys Gly Thr Lys Met Pro Ala Gln
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 20 25 30
 Leu Ala Gln Pro Trp Arg Asn Glu Asn Tyr Glu Arg Pro Val Asp Leu
 35 40 45
 Glu Gly Ser Gly Asp Asp Asp Pro Phe Gly Asp Asp Glu Leu Asp Asp
 50 55 60
 Ala Tyr Ser Gly Ser Gly Ser Gly Tyr Phe Glu Gln Glu Ser Gly Leu
 65 70 75 80
 Glu Thr Ala Val Ser Leu Thr Thr Asp Thr Ser Val Pro Leu Pro Thr
 85 90 95
 Thr Val Ala Val Leu Pro Val Thr Leu Val Gln Pro Met Ala Thr Pro
 100 105 110
 Phe Glu Leu Phe Pro Thr Glu Asp Thr Ser Pro Glu Gln Thr Thr Ser
 115 120 125
 Val Leu Tyr Ile Pro Lys Ile Thr Glu Ala Pro Val Ile Pro Ser Trp
 130 135 140
 Lys Thr Thr Thr Ala Ser Thr Thr Ala Ser Asp Ser Pro Ser Thr Thr
 145 150 155 160
 Ser Thr Thr Thr Thr Thr Ala Ala Thr Thr Thr Thr Thr Thr Thr
 165 170 175
 Ile Ser Thr Thr Val Ala Thr Ser Lys Pro Thr Thr Thr Gln Arg Phe
 180 185 190
 Leu Pro Pro Phe Val Thr Lys Ala Ala Thr Thr Arg Ala Thr Thr Leu
 195 200 205
 Glu Thr Pro Thr Thr Ser Ile Pro Glu Thr Ser Val Leu Thr Glu Val
 210 215 220
 Thr Thr Ser Arg Leu Val Pro Ser Ser Thr Ala Lys Pro Arg Ser Leu
 225 230 235 240
 Pro Lys Pro Ser Thr Ser Arg Thr Ala Glu Pro Thr Glu Lys Ser Thr
 245 250 255
 Ala Leu Pro Ser Ser Pro Thr Thr Leu Pro Pro Thr Glu Ala Pro Gln
 260 265 270
 Val Glu Pro Gly Glu Leu Thr Thr Val Leu Asp Ser Asp Leu Glu Val
 275 280 285
 Pro Thr Ser Ser Gly Pro Ser Gly Asp Phe Glu Ile Gln Glu Glu Glu

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300

290

295

Glu Thr Thr Arg Pro Glu Leu Gly Asn Glu Val Val Ala Val Val Thr
305 310 315 320
Pro Pro Ala Ala Pro Gly Leu Gly Leu Asn Ala Glu Pro Gly Leu Ile
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340 345 350
Asn Ile Leu Glu Arg
355

<210> 9
<211> 123
<212> PRT
<213> HOMO SAPIENS

<400> 9

Arg Ala Glu Leu Thr Ser Asp Lys Asp Lys Asp Met Tyr Leu Asp Asn
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20 25 30
Tyr Ala Ser Ala Ser Gly Ser Gly Ala Asp Glu Asp Val Glu Ser Pro
35 40 45
Glu Leu Thr Thr Thr Arg Pro Leu Pro Lys Ile Leu Leu Thr Ser Ala
50 55 60
Ala Pro Lys Val Glu Thr Thr Thr Leu Asn Ile Gln Asn Lys Ile Pro
65 70 75 80
Ala Gln Thr Lys Ser Pro Glu Glu Thr Asp Lys Glu Lys Val Asn Leu
85 90 95
Ser Asp Ser Glu Arg Lys Met Asp Pro Ala Glu Glu Asp Thr Asn Val
100 105 110
Tyr Thr Glu Lys His Ser Asp Ser Leu Phe Lys
115 120

<210> 10
<211> 43
<212> PRT
<213> RATTUS RATTUS

<400> 10

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1 5 10 15
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20 25 30
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35 40

<210> 11
<211> 43

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<212> PRT
 <213> MUS SP

<400> 11

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 20 25 30
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 35 40

<210> 12
 <211> 42
 <212> PRT
 <213> RANA SP

<400> 12

Tyr Ile Asp Ser Thr Glu Ser Ser Gly Asn Tyr Pro Val Asp Asp Asp
 1 5 10 15
 Asp Tyr Ser Ser Gly Ser Gly Ser Gly Ile Pro Ala Arg Gly Asp Asp
 20 25 30
 Glu Asp Glu Asn Val Val Leu Thr Thr Val
 35 40

<210> 13
 <211> 10
 <212> PRT
 <213> HOMO SAPIEN

<220>
 <221> Xaa
 <222> (2)..(2)
 <223> Xaa at position 2 if present, represents Asn, Asp, or Ile

<220>
 <221> Xaa
 <222> (3)..(3)
 <223> Xaa at position 3 represents Phe or Tyr

<220>
 <221> Xaa
 <222> (4)..(4)
 <223> Xaa at position 4 if present, represents Glu, Ser, or Ala

<220>
 <221> Xaa
 <222> (5)..(5)
 <223> Xaa at position 5 if present, represents Leu, Gly, or Ser

<220>
 <221> Xaa
 <222> (6)..(6)
 <223> Xaa at position 6 if present, represents Ala, or Gly

<400> 13

Asp Xaa Xaa Xaa Xaa Xaa Ser Gly Ser Gly

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1          5          10
<210> 14
<211> 10
<212> PRT
<213> HOMO SAPIEN

<220>
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<222> (1)..(1)
<223> Xaa at position 1 represents an amino acid having an acidic sidechain

<220>
<221> Xaa
<222> (2)..(2)
<223> Xaa at position 2 if present, represents Asn, Gln, Asp, Glu, Gly, Ala, Val,
Ile, Leu, Ser, or Thr

<220>
<221> Xaa
<222> (3)..(3)
<223> Xaa at position 3 if present, represents Phe, Tyr, Trp, Leu, or Ile

<220>
<221> Xaa
<222> (4)..(4)
<223> Xaa at position 4 if present, represents Asp, Glu, Gly, Ala, Val, Ile, Leu,
Ser, or Thr

<220>
<221> Xaa
<222> (5)..(5)
<223> Xaa at position 5 if present, represents Gly, Ala, Val, Ile, Leu, Ser, or Thr

<220>
<221> Xaa
<222> (6)..(6)
<223> Xaa at position 6 if present, represents Gly, Ala, Val, Ile, Leu, Ser, or Thr

<400> 14
Xaa Xaa Xaa Xaa Xaa Xaa Ser Gly Ser Gly
1          5          10

<210> 15
<211> 28
<212> PRT
<213> HOMO SAPIEN

<220>
<221> Xaa
<222> (4)..(4)
<223> Xaa at position 4 if present, represents Gly, Ala, Val, Leu, Ile, Cys, Ser,
or Thr

<220>
<221> Xaa
<222> (5)..(5)
<223> Xaa at position 5 represents Gly, Ala, Val, Leu, Ile, Cys, Ser or Thr

<220>

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<221> Xaa
 <222> (7)..(7)
 <223> Xaa at position 7 represents Gly, Ala, Val, Leu or Ile

 <220>
 <221> Xaa
 <222> (27)..(27)
 <223> Xaa at position 27 represents Gly, Ala, Val, Leu, Ile, Cys, Ser or Thr

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 Gln Ile Val Xaa Xaa Asn Xaa Pro Pro Glu Asp Gln Asp Gly Ser Gly
 1 5 10 15

 Asp Asp Ser Asp Asn Phe Ser Gly Ser Gly Xaa Gly
 20 25

 <210> 16
 <211> 60
 <212> PRT
 <213> MUS SP

 <220>
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 <222> (4)..(4)
 <223> Xaa at position 4 if present, represents Gly, Ala, Val, Leu, Ile, Cys, Ser,
 or Thr

 <220>
 <221> Xaa
 <222> (5)..(5)
 <223> Xaa at position 5 represents Gly, Ala, Val, Leu, Ile, Cys, Ser or Thr

 <220>
 <221> Xaa
 <222> (7)..(7)
 <223> Xaa at position 7 represents Gly, Ala, Val, Leu or Ile

 <220>
 <221> Xaa
 <222> (27)..(27)
 <223> Xaa at position 27 represents Gly, Ala, Val, Leu, Ile, Cys, Ser or Thr

 <220>
 <221> Xaa
 <222> (31)..(31)
 <223> Xaa at position 31 represents Pro, Gln or Asn

 <220>
 <221> Xaa
 <222> (33)..(33)
 <223> Xaa at position 33 if present, represents Ala, Val, Leu, Ile, or Met

 <220>
 <221> Xaa
 <222> (37)..(37)
 <223> Xaa at position 37 represents Arg or Gln

 <220>
 <221> Xaa
 <222> (39)..(39)
 <223> Xaa at position 39 represents Gly, Ala, Val, Leu, Ile, Thr or Ser

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<220>
 <221> Xaa
 <222> (40)..(40)
 <223> Xaa at position 40 represents Pro, Ser or Thr

 <220>
 <221> Xaa
 <222> (41)..(41)
 <223> Xaa at position 41 represents Pro, Ser or Thr

 <220>
 <221> Xaa
 <222> (43)..(43)
 <223> Xaa at position 43 represents Ile, Leu, Phe, Tyr, or Trp

 <220>
 <221> Xaa
 <222> (46)..(46)
 <223> Xaa at position 46 represents Gly, Ala, Val, Ile, Leu, Ser or Thr

 <220>
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 <222> (47)..(47)
 <223> Xaa at position 47 represents Trp, Phe, Tyr, Gln or Asn

 <220>
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 <222> (52)..(52)
 <223> Xaa at position 52 represents Ala, Val, Leu, Ile, Thr or Ser

 <220>
 <221> Xaa
 <222> (55)..(55)
 <223> Xaa at position 55 represents Gly, Ala, Val, Leu, Ile, Ser or Thr

 <220>
 <221> Xaa
 <222> (60)..(60)
 <223> Xaa at position 60 represents Gly, Ala, Val, Leu, Ile, Thr or Ser

 <400> 16
 Gln Ile Val Xaa Xaa Asn Xaa Pro Pro Glu Asp Gln Asp Gly Ser Gly
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 Asp Asp Ser Asp Asn Phe Ser Gly Ser Gly Xaa Gly Ala Leu Xaa Asp
 20 25 30
 Xaa Thr Leu Ser Xaa Gln Xaa Xaa Xaa Thr Xaa Lys Asp Xaa Xaa Leu
 35 40 45
 Leu Thr Ala Xaa Pro Thr Xaa Pro Glu Pro Thr Xaa
 50 55 60

 <210> 17
 <211> 21
 <212> DNA
 <213> MUS SP

 <400> 17
 gacaacttct ctggctctgg c

21

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<210> 18
 <211> 21
 <212> DNA
 <213> MUS SP

<400> 18
 gccagagcca gagaagttgt c

21

<210> 19
 <211> 14
 <212> DNA
 <213> MUS SP

<220>
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 <222> (3)..(3)
 <223> n at position 3 represents A, T, C or G

<220>
 <221> n
 <222> (6)..(6)
 <223> n at position 6 represents A, T, C or G

<220>
 <221> n
 <222> (12)..(12)
 <223> n at position 12 represents A, T, C or G

<400> 19
 ganggntctg gnga

14

<210> 20
 <211> 14
 <212> DNA
 <213> MUS SP

<220>
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 <222> (3)..(3)
 <223> n at position 3 represents A, T, C or G

<220>
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 <222> (9)..(9)
 <223> n at position 9 represents A, T, C or G

<220>
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 <222> (12)..(12)
 <223> n at position 12 represents A, T, C or G

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14

<210> 21
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<400> 21

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<210> 22
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<400> 22
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<210> 23
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<400> 23
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<210> 24
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<400> 24
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<210> 25
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<400> 25
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<210> 26
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 <212> DNA
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<400> 26
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<210> 27
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<400> 27
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<210> 28
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<400> 30
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<210> 31
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<400> 31
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<210> 32
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<400> 32
 cgccatcctg atcttcag 18

<210> 33
 <211> 19
 <212> DNA
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<400> 33
 caggatggcg ctggggatg 19

<210> 34
 <211> 175
 <212> PRT
 <213> MUS SP;HOMO SAPIEN

<400> 34

Met Arg Arg Ala Ala Leu Trp Leu Trp Leu Cys Ala Leu Ala Leu Arg
 1 5 10 15

Leu Gln Pro Ala Leu Pro Gln Ile Val Ala Val Asn Val Pro Pro Glu
 20 25 30

Asp Gln Asp Gly Ser Gly Asp Asp Ser Asp Asn Phe Ser Gly Ser Gly
 35 40 45

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Thr Gly Ala Leu Pro Asp Thr Leu Ser Arg Gln Thr Pro Ser Thr Trp
 50 55 60
 Lys Asp Val Trp Leu Leu Thr Ala Thr Pro Thr Ala Pro Glu Pro Thr
 65 70 75 80
 Ser Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro
 85 90 95
 Thr Ser Leu Leu Ile Ser Trp Asp Ala Pro Ala Val Thr Val Arg Tyr
 100 105 110
 Tyr Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu
 115 120 125
 Phe Thr Val Pro Gly Ser Lys Ser Thr Ala Thr Ile Ser Gly Leu Lys
 130 135 140
 Pro Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Gly Arg Gly
 145 150 155 160
 Asp Ser Pro Ala Ser Ser Lys Pro Ile Ser Ile Asn Tyr Arg Thr
 165 170 175

<210> 35
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 <212> DNA
 <213> MUS SP

<400> 35
 atgtcgactg caaccggcaa ctcggatcca

30

<210> 36
 <211> 24
 <212> DNA
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<400> 36
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24

<210> 37
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 <212> DNA
 <213> HOMO SAPIEN

<400> 37
 accagcgag cccgggagcat cacc

24

<210> 38
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<400> 38
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25

<210> 39
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Seq101353.232.txt

<212> PRT
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<400> 39

Met Arg Arg Ala Ala Leu Trp Leu Trp Leu Cys Ala Leu Ala Leu Arg
 1 5 10 15
 Leu Gln Pro Ala Leu Pro Gln Ile Val Ala Val Asn Val Pro Pro Glu
 20 25 30
 Asp Gln Asp Gly Ser Gly Asp Asp Ser Asp Asn Phe Ser Gly Ser Gly
 35 40 45
 Thr Gly Ala Leu Pro Asp Thr Leu Ser Arg Gln Thr Pro Ser Thr Trp
 50 55 60
 Lys Asp Val Trp Leu Leu Thr Ala Thr Pro Thr Ala Pro Glu Pro Thr
 65 70 75 80
 Ser Ala Ala Gly Ser Ile Thr Thr Leu Pro Ala Leu Pro Glu Asp Gly
 85 90 95
 Gly Ser Gly Ala Phe Pro Pro Gly His Phe Lys Asp Pro Lys Arg Leu
 100 105 110
 Tyr Cys Lys Asn Gly Gly Phe Phe Leu Arg Ile His Pro Asp Gly Arg
 115 120 125
 Val Asp Gly Val Arg Glu Lys Ser Asp Pro His Ile Lys Leu Gln Leu
 130 135 140
 Gln Ala Glu Glu Arg Gly Val Val Ser Ile Lys Gly Val Cys Ala Asn
 145 150 155 160
 Arg Tyr Leu Ala Met Lys Glu Asp Gly Arg Leu Leu Ala Ser Lys Cys
 165 170 175
 Val Thr Asp Glu Cys Phe Phe Phe Glu Arg Leu Glu Ser Asn Asn Tyr
 180 185 190
 Asn Thr Tyr Arg Ser Arg Lys Tyr Thr Ser Trp Tyr Val Ala Leu Lys
 195 200 205
 Arg Thr Gly Gln Tyr Lys Leu Gly Ser Lys Thr Gly Pro Gly Gln Lys
 210 215 220
 Ala Ile Leu Phe Leu Pro Met Ser Ala Lys Ser
 225 230 235

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 <212> DNA
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43

<210> 41
 <211> 15
 <212> DNA
 <213> MUS SP

Seq101353.232.txt

<400> 41
agagtcaccc ccaga 15

<210> 42
<211> 15
<212> DNA
<213> MUS SP

<400> 42
acaggtgctt tgcca 15

<210> 43
<211> 21
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<400> 43
gccgaaagtt tattacatct g 21

<210> 44
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<220>
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<223> Xaa at positions 1 represents Asp or Glu

<220>
<221> Xaa
<222> (2)..(2)
<223> Xaa at positions 2 if present, represents any amino acid

<220>
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<222> (3)..(3)
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<220>
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<223> Xaa at position 6 if present, represents any amino acid

<220>
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Seq101353.232.txt

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<220>
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<223> Xaa at position 8 if present, represents any amino acid

<220>
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<220>
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<223> Xaa at position 11 if present, represents any amino acid

<400> 44

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Ser Gly Ser Gly
1          5          10          15

<210> 45
<211> 10
<212> PRT
<213> Drosophila sp.

<400> 45

Asp Pro Asp Tyr Ser Gly Ser Gly Phe Gly
1          5          10

<210> 46
<211> 5
<212> PRT
<213> MUS SP

<220>
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<223> Xaa at position 1 represents Asp or Glu

<220>
<221> Xaa
<222> (2)..(2)
<223> Xaa at position 2 represents Gly or any amino acid

<220>
<221> Xaa
<222> (5)..(5)
<223> Xaa at position 5 represents Asp or Glu

<400> 46

Xaa Xaa Ser Gly Xaa
1          5

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